

AMENDMENT TO THE ABSTRACT

Please amend the abstract as follows. A replacement abstract is submitted on a separate sheet in accordance with 37 CFR 1.72.

~~A-pProcesses is are~~ provided to produce a dilute ethylene stream and a dilute propylene stream to be used as feedstocks for producing olefin-based derivatives. Specifically, the dilute ethylene stream is used as a feedstock to produce ethylbenzene, and the dilute propylene stream is used as a feedstock to produce cumene, acrylic acid, propylene oxide and other propylene based derivatives, from a cracked gas stream. One process comprises separating the cracked gas stream to produce a  $C_2^-$  stream and a  $C_2^+$  stream; hydrogenating the  $C_2^-$  stream in a hydrogenation zone to remove a portion of the acetylene to produce the dilute ethylene stream and routing the  $C_2^+$  stream to storage or other process unit. Another process comprises separating a cracked gas stream in a depropanizer zone to form a  $C_3^-$  stream and a  $C_4^+$  stream; separating the  $C_3^-$  stream in a deethanizer zone to form a  $C_2^-$  stream and a  $C_3$  stream; hydrogenating a portion of the acetylene in the  $C_2^-$  stream in a hydrogenation zone to produce a dilute ethylene stream; and routing the  $C_3$  stream to storage or other process unit.

**REPLACEMENT ABSTRACT**

Processes are provided to produce a dilute ethylene stream and a dilute propylene stream from a cracked gas stream. One process comprises separating the cracked gas stream to produce a C<sub>2</sub><sup>-</sup> stream and a C<sub>3</sub><sup>+</sup> stream; hydrogenating the C<sub>2</sub><sup>-</sup> stream in a hydrogenation zone to remove a portion of the acetylene to produce the dilute ethylene stream and routing the C<sub>3</sub><sup>+</sup> stream to storage or other process unit. Another process comprises separating a cracked gas stream in a depropanizer zone to form a C<sub>3</sub><sup>-</sup> stream and a C<sub>4</sub><sup>+</sup> stream; separating the C<sub>3</sub><sup>-</sup> stream in a deethanizer zone to form a C<sub>2</sub><sup>-</sup> stream and a C<sub>3</sub><sup>+</sup> stream; hydrogenating a portion of the acetylene in the C<sub>2</sub><sup>-</sup> stream in a hydrogenation zone to produce a dilute ethylene stream; and routing the C<sub>3</sub><sup>+</sup> stream to storage or other process unit.